

Structured Wikis at Work - Enterprise 2.0 in Action

This is the material for a one hour talk on "**Structured Wikis at Work - Enterprise 2.0 in Action**" for IBM Silicon Valley Labs, 2009-12-03.

Abstract: A wiki enables teams to organize and share content and knowledge in an organic and free manner, and to schedule, manage and document their daily activities. Learn from the founder of TWiki, the leading open source enterprise Wiki what exactly a wiki is, and how you can use it to enhance the communications within your organization and between organizations. Learn also how a structured wiki can bring Web 2.0 into the workplace.



Copyright © 2009 by Twiki, Inc. This presentation may be reproduced as long as the copyright notice is retained and a link is provided back to <http://www.twiki.net/>.



Slide 1: Structured Wikis at Work

How Structured Wikis bring Enterprise 2.0 into the Workplace

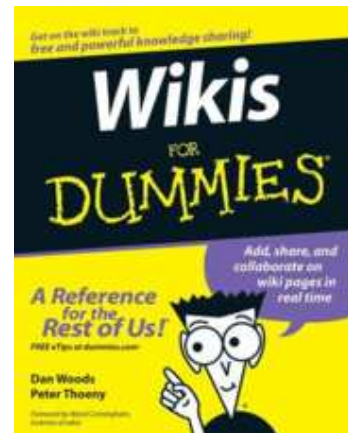
- Wiki, a writable web: Communities can share content and organize it in a way most meaningful and useful to them
- If extended with the right set of functionality, a wiki can be applied to the workplace to schedule, manage, document, and support daily activities
- A structured wiki combines the benefits of a wiki and a database application
- This talk explains basic wikis and structured wiki, covers its deployment, and shows some sample applications using TWiki, an open source enterprise collaboration platform

Presentation for IBM Silicon Valley Labs, 2009-12-03

-- Peter Thoeny - peter.thoeny.public@twikiPLEASENOSPAM.net - [Twiki, Inc.](http://www.twiki.net/)

Slide 2: About Peter

- Peter Thoeny
- CTO and co-founder of Twiki Inc, the Enterprise Agility company
- Founder of TWiki, the open source wiki for the enterprise, managing the project for 11 years
- Invented the concept of structured wikis - where free form wiki content can be structured with tailored wiki applications
- Recognized thought-leader in wikis and social software, featured in numerous articles and technology conferences including LinuxWorld, Business Week, Wall Street Journal and more
- Graduate of the [Swiss Federal Institute of Technology](#) in Zurich
- Lived in Japan for 8 years, developing [CASE tools](#)
- Now in the Silicon Valley for 11 years
- Co-author of Wikis for Dummies book



Slide 3: Agenda

- What is a Wiki?
- Enterprise Collaboration
- Demo of Structured Wiki
- What is TWiki?
- Wiki basics
- Collaboration challenges at the workplace
- Wiki for the workplace
- Structured wikis
- Adding structure
- Initial deployment of a wiki
- Wiki champion
- Overcoming barriers to adoption

Slide 4: What is a Wiki?

- WikiWikiWeb = Writable Web
 - As quick to contribute as e-mail
 - As easy to use as a website
- [Ward Cunningham](#) implemented the original [WikiWikiWeb](#) in 1995 to collaborate on software patterns
- Inspired by HyperCard; some call it a Blog for groups
- The original [WikiWikiWeb](#) has these features:
 - Read-write web, every page can be edited using just a browser
 - HTML form based editing with a simple markup
 - Pages are linked automatically with [WikiWords](#)

Slide 5: Wikis in Plain English (On YouTube)

- Good introduction to wikis
- Search for "Wikis in Plain English" on YouTube

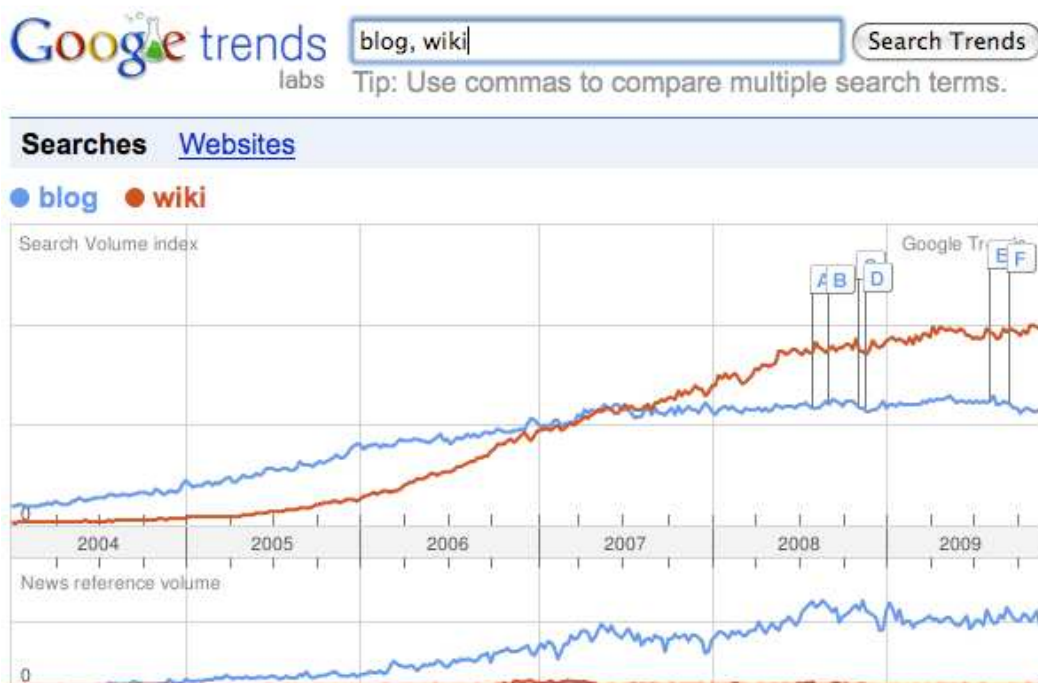


(credit: Lee LeFever, [Common Craft](#))

Slide 6: Blogs vs. Wikis

- Blog: (weblog)
 1. Key: Easy to publish sequential posts
 2. Media to express individual voice
 3. "Post media" (like e-mail), usually with feedback and trackback
 4. Typically [hosted service](#) (e.g. Six Apart's [TypePad](#))
- Wiki: (WikiWikiWeb)
 1. Key: Easy to create and refactor content owned by group
 2. Media to express group voice, deemphasizing identity of individuals
 3. "Refactor media", content may change at any time
 4. Usually open source software, installed on own server
- Some Blogs have wiki-like features, some wikis have blog capabilities

Slide 7: Trend of Blogs and Wikis

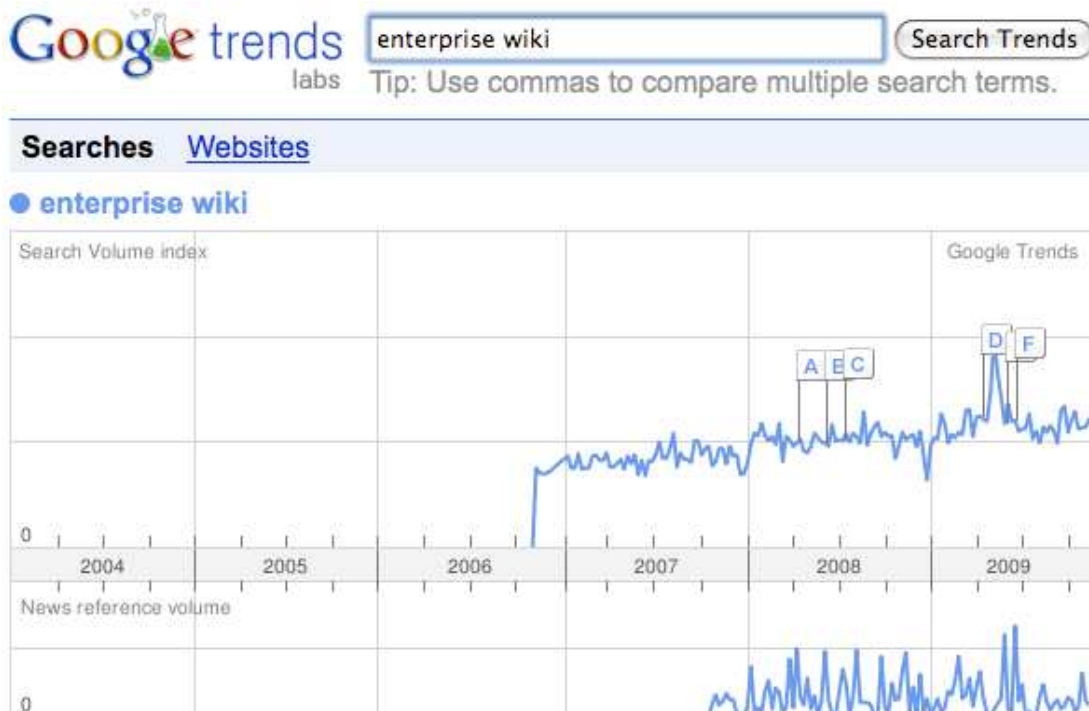


Slide 8: Wikipedia - The 800 Pound Gorilla

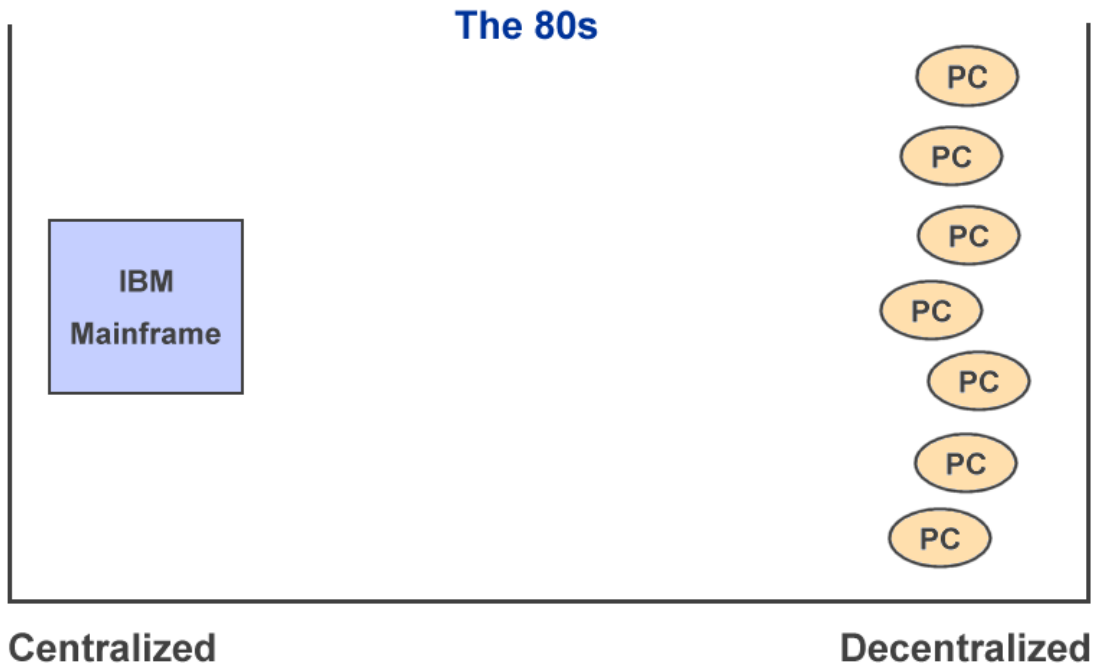
- [Wikipedia](#): Wiki + Encyclopedia
- A free encyclopedia that is being written collaboratively by its readers
- Project started in January 2001
- The most active public Wiki: 2,000,000 articles and 1,000,000 registered users in the English language Wikipedia; many more in other languages
- Anyone in the world can edit [any](#) page.
- *Doesn't that lead to chaos?*
 - Domain experts contribute
 - Well defined policies for contributing and handling content
 - Graffiti gets removed quickly (many eye balls; rollback available)
 - IBM's [research](#) on history flow of articles ([gallery](#))
- Content can be freely distributed and reproduced under the terms of the [GNU Free Documentation License](#) (GFDL)



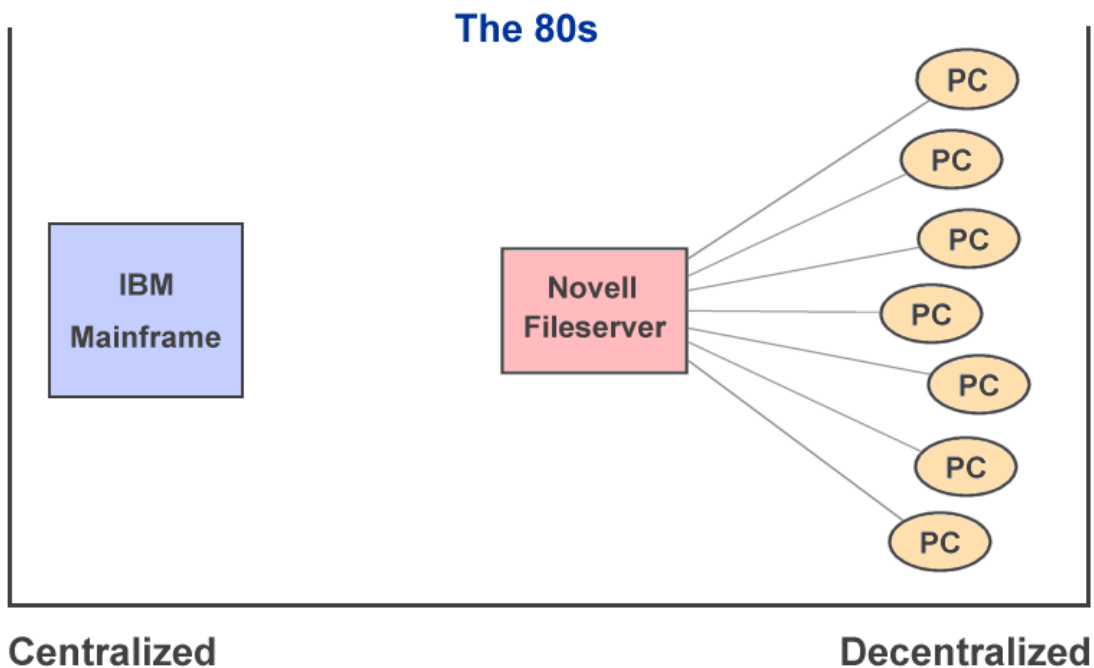
Slide 9: Trend of Term "Enterprise Wiki"



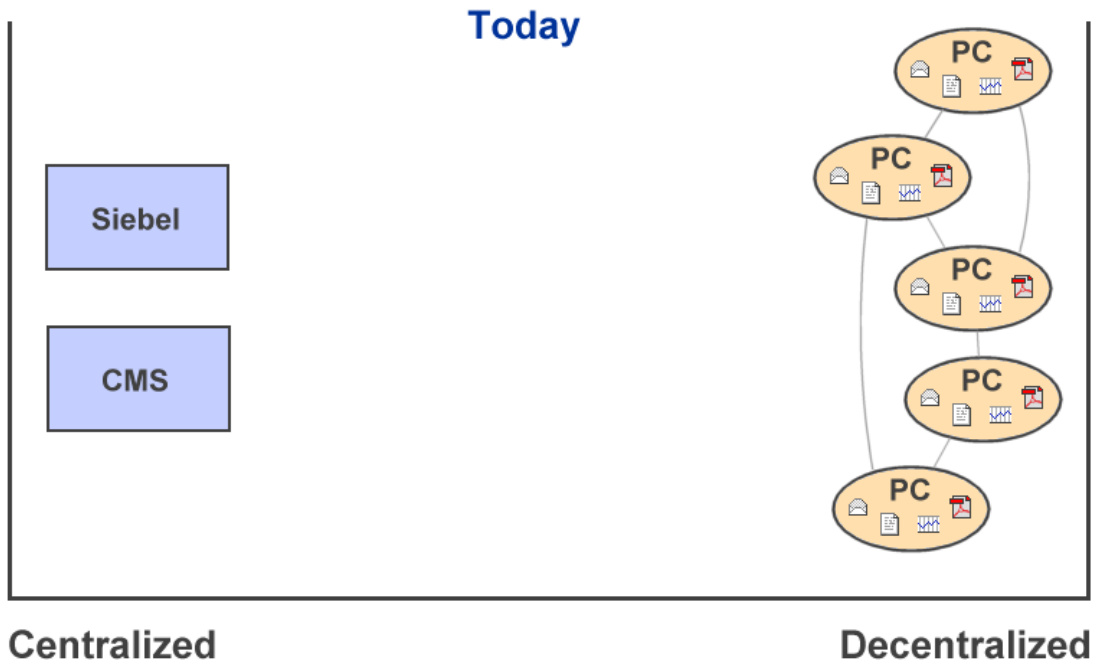
Slide 10: Enterprise Collaboration Landscape 80s



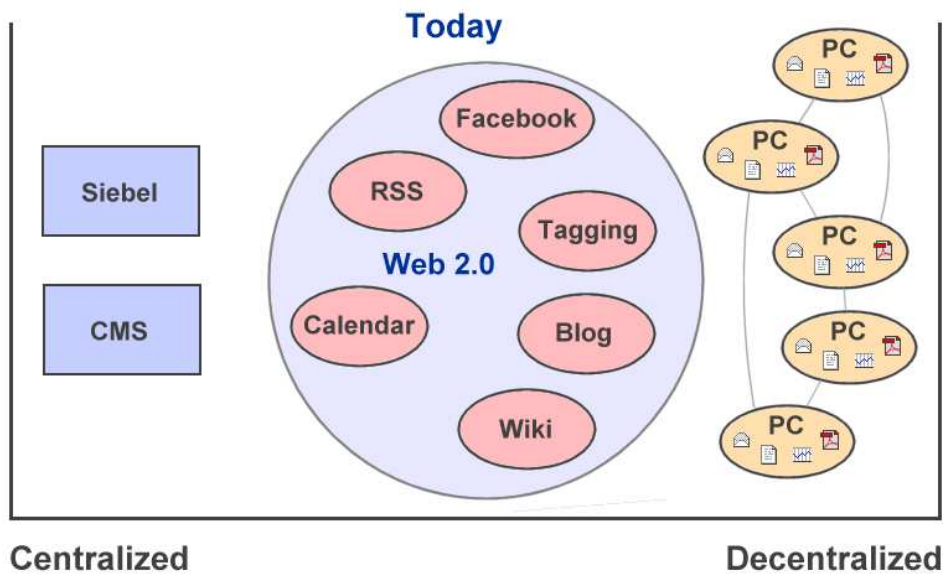
Slide 11: Enterprise Collaboration Landscape 80s - Networked



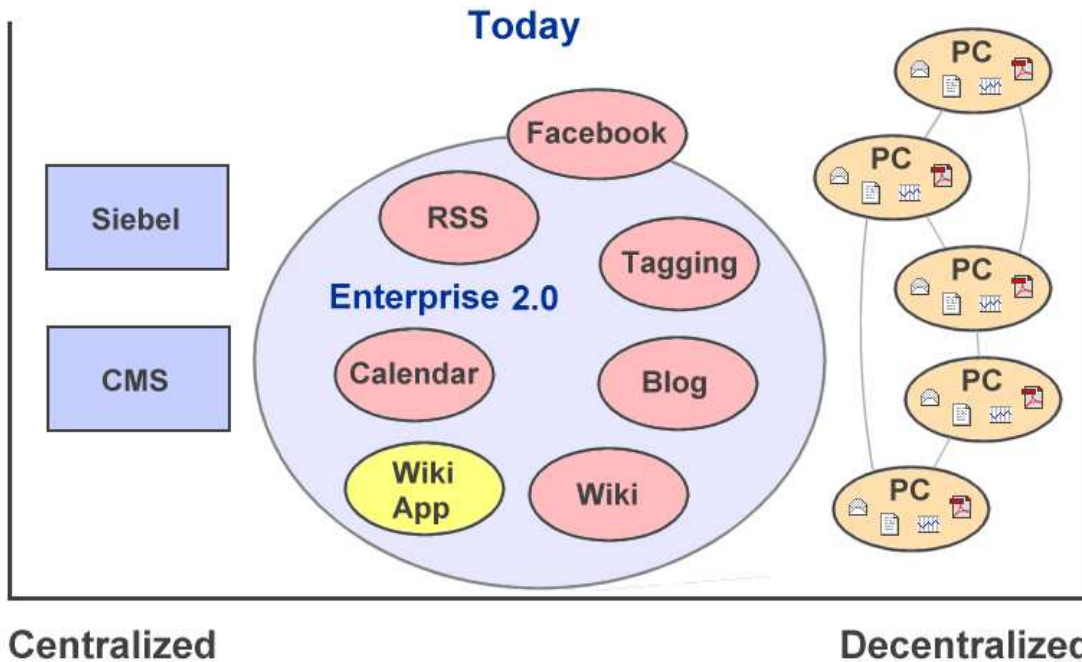
Slide 12: Enterprise Collaboration Landscape Today



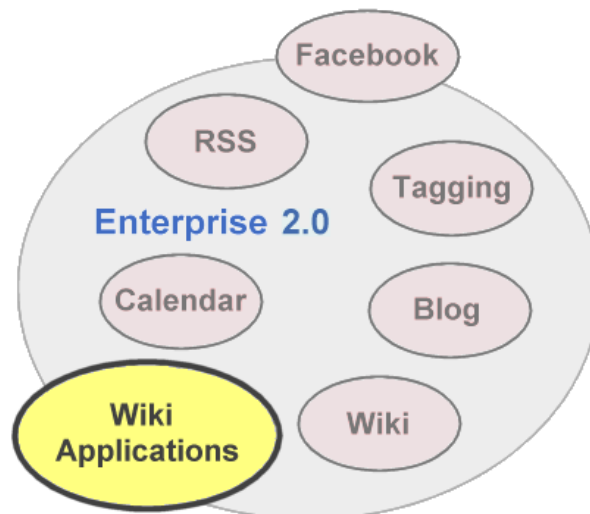
Slide 13: Enterprise Collaboration Landscape Today - Web 2.0



Slide 14: Enterprise Collaboration Landscape Today - Enterprise 2.0



Slide 15: Structured Wiki Applications - Whet Your Appetite



- [Event tracker](#) of Peninsula Swiss Club
- [Outage tracker](#) of an IT organization
- [Sales Pipeline Tracker](#) of Twiki, Inc.

Slide 16: Demo: Event Tracker

Event Plans

ID	Name	Date
1010	Fondue 2008	2008-02-02
1011	Easter 2008	2008-03-23
1012	all Generation Picnic 2008	2008-05-04
1013	Semi Annual Meeting 2008	2008-06-08
1014	1st of August Celebration 2008	2008-08-02
1015	Special event 2008	2008-09-13
1016	Metzgete 2008	2008-11-01
1017	General Meeting 2008	2008-11-15
1018	Samichlaus 2008	2008-12-06

New Event Plan

Event name:	<input type="text"/>
Date:	<input type="text" value="2008-07-28"/> Format YYYY-MM-DD
Based on:	<input type="text" value="default template"/>
<input type="button" value="Create New Event Plan"/>	

Slide 17: Demo: Outage Tracker

Monitoring of Outages and Incidents

Monitoring Center	Events				Total
	Out	High	Med	Low	
DE-HA	0	0	4	0	4
IN-BA	0	0	0	0	0
JP-TO	1	0	1	0	2
US-CA	2	0	0	0	2
US-NY	3	0	0	0	3
US-TX	0	1	1	1	3
Total:	6	1	6	1	14

Events of US-TX

Event	Name	Start Date
000011	T22 server: Disk capacity 90%	2007-10-19
000012	Network sluggish Intermittently	2007-10-22
000017	Tsunami West Coast	2008-03-12

[Show outages/incidents by monitoring center](#)

[Create new outage/incident](#)

Slide 18: Demo: Sales Pipeline Tracker

You are here: TWiki > ClientWeb > SPTs (27 Nov 2007, PeterThoeny)

Sales Pipeline Tracker

[Edit](#)

The diagram illustrates a sales pipeline with the following stages: 1-Prospect, 2-Eval, 3-Quote, 4-Negotiate, 5-PO, 6-Contract, 7-Install, 8-Invoiced, and 9-Collected. A 'B-Lost' stage is also shown. The pipeline is divided into 'Open' (stages 1-5) and 'Fulfillment' (stages 6-9). A 'Create SPT' button is linked to stage 1, and a 'TWIKI.NET Website' button is linked to stage 5. A 'A-Parked' stage is also shown between 3-Quote and 4-Negotiate.

SPT	Stage	Title	Account Contact	Assigned to	Type	Opportunity	Forecast
Filter	8-Invoiced						
10002	8-Invoiced	TWiki for PR department		Peter Thoeny	Standard	\$7,000	\$7,000
10010	8-Invoiced	TWiki intranet		Rod Beckstrom	Standard	\$3,000	\$3,000

- Number of entries: 2
- Total forecast: **\$10,000** (out of \$10,000 opportunity)

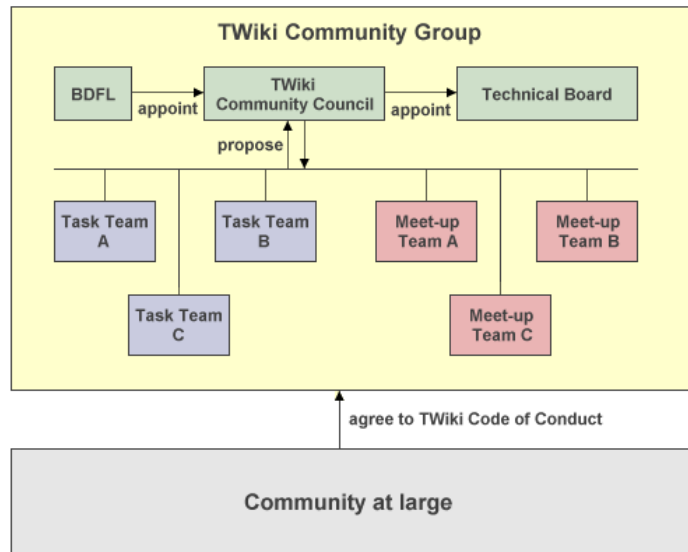
Slide 19: What is TWiki?

- TWiki is a wiki engine *and* wiki application platform
- TWiki is specifically built for the workplace
- Large number of [TWiki Extensions](#): 400 Add-Ons, Plugins, Skins
- Open Source software (GPL) with active community, hosted at <http://TWiki.org/>
- 5,000+ downloads per month, 500,000 total downloads, estimate 60,000+ installations
- [Twiki, Inc](#) offers support subscriptions, hosting, training and professional services
- [Consultants](#) are available to customize TWiki



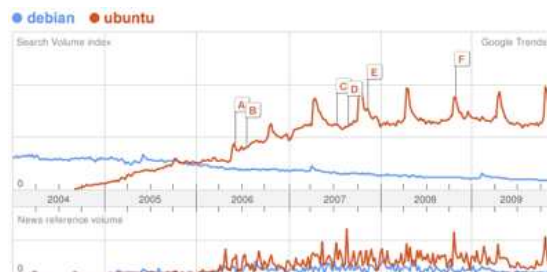
Slide 20: TWiki Open Source Community

- [Clear mission](#), [charter](#), [roadmap](#) and [release focus](#)
- 11 years - several iterations on governance
- Ubuntu style [community governance](#) and [code of conduct](#) since Oct 2008
 - Designed to scale
- Small but helpful & inviting community
- Call to action: [Get involved!](#)



Slide 21: Commercial Open Source

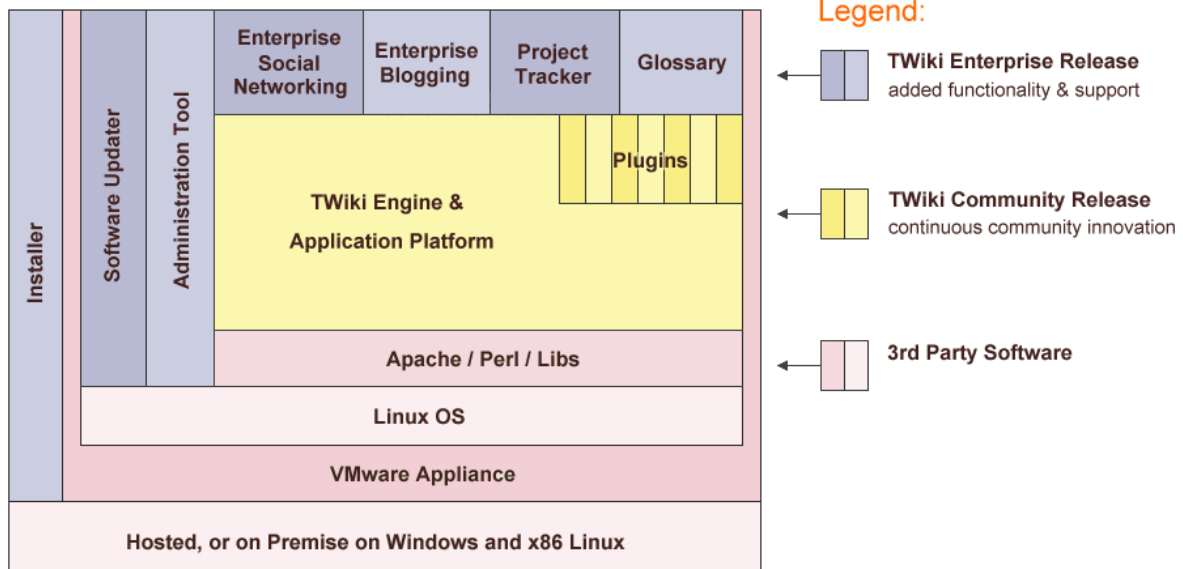
- Commercial open source^[1]
 - vs. community open source
- Model of Fedora/Red Hat, Zimbra, MySQL
 - vs. Debian, PostgreSQL, ...
- Criteria for success:
 - Market share, pace of innovation, health of community
- Company supporting community: TWiki.org hosting, feature enhancements, sponsor dev summits and user meet-ups, marketing, ...



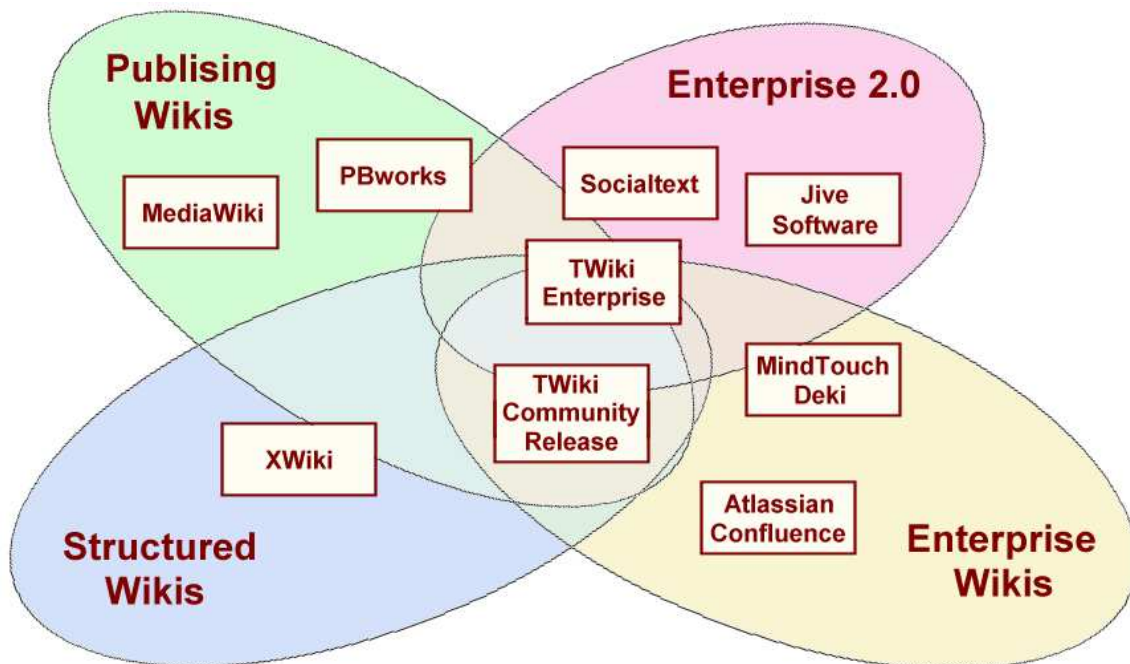
[1] [The Commercial Open Source Business Model](#) by Dirk Riehle

Slide 22: Twiki Enterprise Agility Platform

System Architecture Diagram of Twiki Enterprise Agility Platform



Slide 23: Competitive Landscape of Wikis & Enterprise 2.0



Slide 24: What is TWiki used for?

- Shared notebook for teams: Projects, repository, scheduling, meetings
- Departmental collaboration tool: Processes, project reviews, QA tracking
- Intranet publishing tool: IT, HR, ISO standards
- CMS with focus on free-form collaboration: Requirements capture
- Knowledge base: Problem/solution pairs with attached patches
 - TWiki started its life as a [KB for support](#)
- Platform to create wiki applications, such as news portals, inventory systems, issues tracking systems

Slide 25: Who is using TWiki?

- Many corporations, such as 3Com, AMD, Alcatel, AT&T, Boeing, ... Xerox
 - BT, Disney Corp, Motorola, SAP, TI, Wind River and others have submitted [success stories](#)
 - Major TWiki deployments: Google, Motorola, Nokia, Oracle, Sun, Wind River, Yahoo
- Academia, such as [Biowiki of UC Berkeley](#)
- Also Internet communities, such as [Java.net's Javapedia](#)
- Browse the [TWiki Installation](#) directory to see who is using TWiki for what purpose

Slide 26: Wiki Basics: Getting Started

- **Homepage:** [Main.WebHome](#)
- **Register:** [Create an account](#)
- **Webs:** A TWiki site is divided into webs, each one represents an area for collaboration: [Blog](#), [Codev](#), [Main](#), [Plugins](#), [Sandbox](#), [Support](#), [TWiki](#)
- **Topics:** Each web is made up of hyperlinked [topics](#) (web pages)
- **Browse:** This is a site like other sites. Read and follow interesting links.
- **Edit:** Every page has an edit link, feel free to edit any page! ([sample page](#))
- **Relax:** Everything is under version control

Slide 27: What is a Structured Wiki?

- Goal of a structured wiki:
 - Combine the benefits of a wiki and a database application
- Wiki:
 - Organic content: The structure and text content of the site is open to editing and evolution
 - Open content: Readers can *refactor* incomplete or poorly organized content at any time
 - Hyper-linked: Many links to related content due to WikiWord nature
 - Trust: Open for anyone to edit, "soft security" with audit trail
- Database application:
 - Highly structured data
 - Easy reporting
 - Workflow (e.g. purchase requisition)
 - Access control

Slide 28: Usage Pattern in a Structured Wiki

1. Users typically start with unstructured wiki content
 - Example: Call-center status board
 2. User discovers patterns in content
 - Example: Call-center status board has fixed list of users and fixed list of time slots
 3. User or administrator builds an application, typically in iterations
 - Goal: Automate tasks based on discovered patterns
- In other words: A structured wiki enables **users** to build lightweight applications

Slide 29: Example: Call-Center Status Board, v1

- Requirement for status board:
 - Easily see who is on call at what time
 - Easily change the status board
- Start with a simple bullet list for status board v1:
 - 07:00am - 11:00am: Richard
 - 11:00am - 03:00pm: Peter
 - 03:00pm - 07:00pm: Sam
- See [CallCenterStatusBoard](#) example

Slide 30: Example: Call-Center Status Board, v2

- Status board v1 does the job, but lets make it more presentable and useful:
 - Convert the bullets into a table
 - Use [WikiWord](#) links to team member's home pages for easy reference
 - Add Backup person
- Improved status board v2:

Start	End	Primary	Backup
07:00am	11:00am	RichardDonkin	
11:00am	03:00pm	PeterThoeny	
03:00pm	07:00pm	SamHasler	

- See [CallCenterStatusBoardV2](#) example

Slide 31: Example: Call-Center Status Board, v3

- Status board v2 is presentable, now lets make it more user friendly:
 - Use the [TWiki:Plugins.EditTablePlugin](#) to select the times and names from a list
- Improved status board v3, view and edit:

Start	End	Primary	Backup
07:00am	11:00am	RichardDonkin	
11:00am	03:00pm	PeterThoeny	
03:00pm	07:00pm	SamHasler	

 Edit

Start	End	Primary	Backup
07:00am	11:00am	Main.RichardDonkin	
11:00am	03:00pm	Main.PeterThoeny	
03:00pm	07:00pm	Main.SamHasler	

Save table Quiet save Cancel

- See [CallCenterStatusBoardV3](#) example

Slide 32: Why Deploy a Wiki?

- Wikis are robust
- Wikis are fun and easy to use
- Wikis solve some of the limitations of existing collaboration software:
 - Maintenance of static intranets
 - Taming internal e-mail flood
 - Implementation of business processes

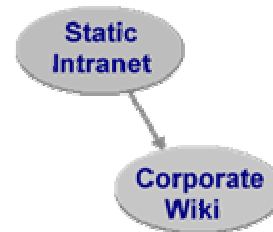
Slide 33: Challenges of Static Intranets

- Some content is outdated
- Incomplete content
- When was the page last updated?
- Difficult to find content
- Inconsistency across departments
- Special tools, knowledge and permission required to maintain
- Content is static, it has a "**webmaster syndrome**":
If an employee discovers a page with incorrect or insufficient information, the employee will often ignore it because it takes too much time to find out who the webmaster is and to write an e-mail requesting an update



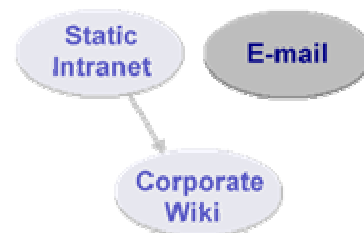
Slide 34: Wikis and Static Intranets

- Move some/all Intranet content into a wiki
 - No difference for readers to browse and search content
 - Employees are empowered to fix content on the spot
 - Ease of maintenance
 - No need to install client side software
 - Consistent look & feel
- Paradigm shift
 - from: **webmasters maintain content**
 - to: **domain experts and casual users maintain content**



Slide 35: Challenges of E-mail

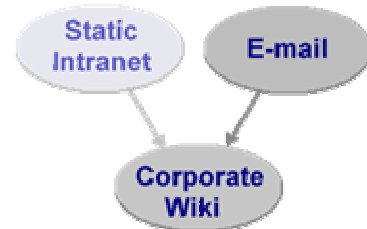
- E-mail and mailing lists are great, but:
 - Post and reply vs. post and **refine/refactor**
 - Great for discussion, but ... hard to find "final consensus" on a thread
 - E-mail is not hyper-linked and is not structured, content can't be grouped easily into related topics



- E-mail and attachments are not version controlled and it is difficult to determine the history of a document
- Not all interested people / too many people in the loop

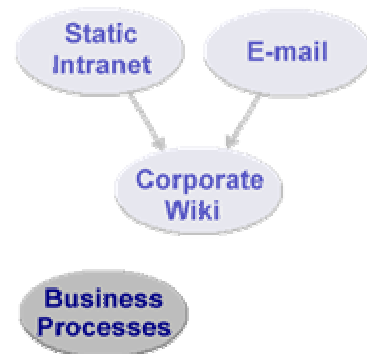
Slide 36: Wikis and E-mail

- Move some e-mail traffic into a wiki
 - Ease of reference (cross-linking)
 - Flexible notification (favorites only, daily digest, RSS/ATOM feed)
 - Pockets of knowledge made available to interested parties
 - Audit trail / domain experts
- Paradigm shift
 - from: **post & reply**
 - to: **post & refine & cross-link**
- Send e-mail with link to content instead of content itself



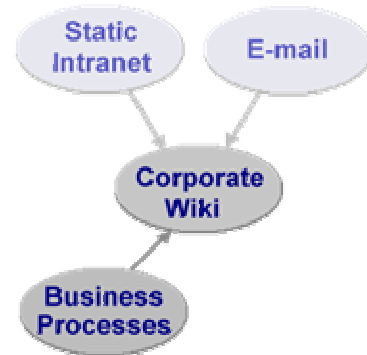
Slide 37: Challenges of Business Processes

- Business processes are implemented in large scale by IT department (Sarbanes-Oxley compliance etc.)
- Teams follow formal/informal workflow to accomplish tasks, which is often a paper-based process (rolling out laptops to employees etc.)
- No resources allocated to implement applications to automate these processes; IT department has no bandwidth to implement lightweight applications for a variety of teams



Slide 38: Wikis and Business Processes

- A structured wiki is a flexible tool to support evolving processes
 - in the free-form wiki way -- linked pages, collaboratively maintained
 - and with a structured wiki application -- forms, queries, reports
- Content contributors with moderate skill sets can build web applications
- Paradigm shift
 - from: **programmers create applications**
 - to: **all of us can build applications**



Slide 39: Requirements for a Wiki at the Workplace

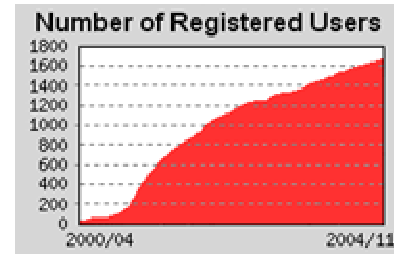
- Version control -- audit trail
- Access control -- security
- File attachments -- document management
- Ease of use -- productivity
- Ease of administration -- productivity
- Feature set -- create web applications
- API -- integration with existing enterprise applications
- Scalability -- room to grow
- Support -- get help when needed

Slide 40: Role of Wiki Champion

- A wiki champion is a person who:
 - understands the process of the work for a given project or business (the domain), and
 - knows how to use a wiki (best practices in collaboration)
- The wiki champion is coaching the employees
 - Advocate, important role especially in the initial phase of a wiki
- Typically a part time role
- As the wikis gets larger and grows laterally, new wiki champions emerge

Slide 41: Initial Deployment of a Wiki

- Plan content and rollout
 - Pain killer vs. vitamins
- Build initial structure
- Populate initial content with help from early adopters
- Initial rollout with smaller group
- Train and coach users
- Do not underestimate inertia and time
- Expect quick growth after slow start
 - Example: [Wind River's wiki](#) has now 120K pages and 20K page changes / month



Slide 42: To Click on "Edit" or not to Click



Slide 43: Be Aware of Mental Barriers

- Wikis can be intimidating; the wiki pages appear "official" and corporate
 - Overcome your own internal resistance to edit existing content
 - Paradigm shift: Content is owned by team, not individual
- I want my contributions to be near "perfect"
 - It is more effective to post content early and let the team provide feedback and revise it iteratively

Slide 44: Wikis are Fun

- Wikis are easy to use
- Even people with moderate skill sets can build great content
- Wikis are quick
- Wikis change as your workflow changes

Slide 45: Summary

- A structured wiki is a powerful platform for web collaboration
 - Collaborate in free form; add structure as needed
 - Use it as shared notebooks, a departmental collaboration tool, a publishing tool, a CMS and a knowledge base
 - Use it as a platform to create lightweight applications
- Easy to share knowledge
 - Corporate brain gives a competitive advantage
- Careful coaching is needed
 - Offer user training and wiki champion training
- Viral growth after people "get it"

Slide 46: How can TWiki help your Organization?

The image shows the text "Q&A" in a large, bold, blue font. The letters are slightly shadowed, giving them a 3D appearance as if they are floating above the page.

Notes

- This presentation is available at <http://twiki.org/cgi-bin/view/Codev/TWikiPresentation2009x12x03>



Copyright © 2009 by Twiki, Inc. This presentation may be reproduced as long as the copyright notice is retained and a link is provided back to <http://www.twiki.net/>.



-- [PeterThoeny](#) - 2009-12-03

Topic revision: r5 - 2009-12-03 - 00:01:24 - [PeterThoeny](#)